1	IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS
2	MARSHALL DIVISION
3	LASERDYNAMICS * Civil Docket No. * 2.06-CV-348
4	<pre> * 2:06-CV-348 VS.</pre>
5	* July 2, 2009
6	2011.11., 11 11
7	TRANSCRIPT OF TRIAL PROCEEDINGS BEFORE THE HONORABLE T. JOHN WARD UNITED STATES DISTRICT JUDGE
8	AND A JURY
9	APPEARANCES:
10	FOR THE PLAINTIFFS: MR. THOMAS SANKEY MR. GREGORY LUCK
11	Duane Morris 3200 Southwest Freeway
12	Suite 3150 Houston, TX 77027
13	MR. TIMOTHY TROP
14	Trop Pruner & Hu 1616 South Voss Road
15	Suite 750 Houston, TX 77057
16	MR. JEFFREY RAMBIN
17	Capshaw DeRieux 1127 Judson Road
18	Suite 220 Longview, TX 75601
19	APPEARANCES CONTINUED ON NEXT PAGE:
20	AFFERRANCES CONTINUED ON NEXT FAGE.
21	COURT REPORTERS: MS. SUSAN SIMMONS, CSR MS. JUDY WERLINGER, CRS
22	MS. SHELLY HOLMES Official Court Reporters
23	100 East Houston, Suite 125 Marshall, TX 75670
24	903/935-3868
25	(Proceedings recorded by mechanical stenography, transcript produced on CAT system.)

1	
2	APPEARANCES CONTINUED:
3	FOR THE DEFENDANTS: MR. MELVIN WILCOX
4	Yarbrough & Wilcox 100 East Ferguson
5	Suite 1015 Tyler, TX 75702
6	MR. JOHN PARKER Paul-Hastings
7	600 Peachtree St., NE Suite 2400
8	Atlanta, GA 30308
9	MR. CHRISTIAN PLATT MS. ERICKA SCHULZ
10	Paul-Hastings 4747 Executive Drive
11	12th Floor San Diego, CA 92121
12	MS. KATHERINE MURRAY
13	MR. JAY CHIU Paul-Hastings
14	515 South Flower Street 25th Floor
15	Los Angeles, CA 90071
16	* * * * * *
17	PROCEEDINGS
18	
19	(Jury out.)
20	COURT SECURITY OFFICER: All rise.
21	THE COURT: Please be seated.
22	Okay. What is it that we want now?
23	MR. GARNETT: Good afternoon, Your Honor.
24	Again, my name is Terry Garnett.
25	THE COURT: Why don't you step to the

```
podium so the court reporter can hear you and perhaps I
1
2
   can better, too.
3
                  MR. GARNETT: Your Honor, I just wanted
  to clarify that it's okay for me to question my damage
4
5
  expert on the 16 non-settlement license agreements and
   that QSI or -- excuse me -- QCI could have purchased
6
   licensed drives from those manufacturers as an
8
   alternative to buying from QSI.
9
                  THE COURT: You got any objection to that
10
   line of questioning, Counselor?
                  MR. LUCK: We do not, Your Honor, but
11
12
   there is another slide that is at issue that we have an
13
   issue with.
14
                  MR. GARNETT: Okay. And then the second
15
   issue I wanted to raise, Your Honor, is I wanted to make
16
   an offer of proof. I believe there was some
17
   representations to the Court this morning, and I'm not
   clear on what exactly those were, but I just want to
18
19
  make the record clear that in Trial Exhibit QDX414 and
20
   Trial Exhibit QDX416, which had been preadmitted, there
   is evidence of sales from QSI to QCI in the United
21
   States of accused drives.
22
2.3
                  And obviously, that would impact the
  hypothetical negotiation date, but I understand the
24
25
  Court's ruling this morning that the hypothetical
```

```
negotiation date is 2006. We were prepared to proceed
1
2
   that way, but I did want to make that offer of proof at
  the Court's convenience.
3
                  MR. LUCK: Your Honor, if I could add to
4
5
   that, the particular issue is a new -- a demonstrative
   slide is at issue --
6
7
                  THE COURT: Wait a minute. What do you
8
   say about this?
9
                  My ruling this morning with respect to
10
   the -- I wasn't aware of the sale that -- if y'all have
11
   brought this sale between the two entities up, I wasn't
   aware of it.
12
13
                  Mr. Parker, has that been brought up?
                  MR. PARKER: I didn't bring it up, Your
14
15
   Honor, because I just did not remember the exhibit. So
16
   it is entirely my fault.
17
                  THE COURT: No, I'm not saying fault.
   I'm just saying that my ruling this morning, since I
18
19
   wasn't aware of those exhibits --
20
                  MR. PARKER: Yes, sir.
21
                  THE COURT: -- certainly wasn't intended
   to cover those exhibits.
22
2.3
                  MR. PARKER: Yes, sir.
24
                  MR. GARNETT: Yes, sir.
25
                  THE COURT: What do you say about those
```

```
1
   exhibits -- I'm going to get this -- I'm going to try to
   get these compartmentalized.
2
3
                  What do you say about those exhibits --
   exhibit of sale of -- between QSI to QCI in the United
4
5
   States?
6
                  MR. LUCK: Irrespective of the sale, Your
   Honor, the date of the hypothetical is the first date of
8
   infringement, and that requires, for our claims in this
9
   case against QCI, notice of the patent.
                  QCI has told us from the beginning of
10
11
   this case they had no notice until sued in this case,
12
   and I believe we heard that in the testimony in the
   trial here.
13
                  So they could not have induced or
14
15
   contributorially infringed, until they knew of the
16
   patent in August 2006, irrespective of these sales.
                  We've not had an opportunity to analyze
17
   all the documents right now. Obviously, I got these --
18
19
                  THE COURT: Well, these are in evidence.
20
   You've had an opportunity to see them, because they're
21
   preadmitted is what counsel just told him.
22
                  MR. GARNETT: Yes, sir. May I address
23
   the comments by Mr. Luck?
24
                  THE COURT: Pardon?
25
                  MR. GARNETT: May I address Mr. Luck's --
```

```
1
                  THE COURT: Are you through?
2
                  MR. LUCK: I would also answer, in the
3
   interrogatory response that we received that was late
   after the date of expert reports, I don't recall seeing
4
5
   this argument as to the 2003 date at that time.
6
                  THE COURT:
                              I thought he said it was
7
   2001.
8
                  When did you say the sale was?
9
                  MR. GARNETT: It was actually 2003, Your
   Honor, and, originally, our expert's report was written
10
   as if QSI was being accused of infringement, and they
11
12
   were until about a week ago, maybe a week and a half.
13
                  And then they dropped all their damage
14
   claims against QSI.
                        So we have to revise our report
15
   accordingly. And that's what we're attempting to do.
16
                  And I wanted to also clear up the record
17
   that there are preadmitted exhibits that show sales in
18
   2003, and that would be direct infringement, because
19
   they're from QSI, Your Honor, to QCI into the United
20
   States.
21
                  Notice is an issue for the damage period.
   Notice is not an issue as to when there would be a sale
22
23
   for first infringement as to the hypothetical
24
   negotiation date.
25
                  THE COURT: Well, their theory of
```

```
infringement requires intentional conduct, doesn't it?
1
2
                  MR. GARNETT: Your Honor, for certain
3
   drives, there's -- it's not a contributory infringement
   theory. In my understanding, it would be direct
4
5
   infringement because the sales were made directly into
  the United States, and that's the sale that I'm
6
   discussing in 2003. And so notice would be irrelevant.
8
                  THE COURT: Sales made directly in the
9
   United States by QCI?
10
                  MR. GARNETT: QSI to QCI, so QCI, once
11
   they accepted that drive, would be an infringer, a
12
   direct infringer, actually, in the United States.
13
                  MR. LUCK: Your Honor, unless there's
   evidence that QCI used the drives, this process claim --
14
15
   I've not seen any evidence that QCI used the drives.
16
                  THE COURT: I'm going to exclude it. You
   can offer those two exhibits on -- on your bill.
17
18
                  MR. GARNETT: Thank you, Your Honor.
19
   Appreciate that.
20
                  THE COURT: Well, you just proffer them.
21
   They'll be a proffer of proof -- exhibits -- what are
   the numbers?
22
2.3
                  MR. GARNETT: I can do it now.
24
   Trial Exhibit QDX414 and Trial Exhibit QDX416.
25
                  THE COURT: They're part of the record.
```

```
You're restricted based upon my rulings from questioning
1
2
   the expert about that. They're already a part of the
3
  record.
                  MR. GARNETT: Yes, Your Honor. I realize
4
5
  that. And so --
6
                  THE COURT: Okay. Now, what -- okay.
7
   That takes care of your problem, correct?
8
                  MR. GARNETT: And I just want to clarify.
9
  We're proceeding on 2006 as the --
10
                  THE COURT: Correct.
11
                  MR. GARNETT: Thank you, Your Honor.
12
                  THE COURT: Did you have something -- you
   said there was some exhibit you wanted to talk about.
13
14
                  MR. LUCK: It's the same document, Your
15
   Honor. It was a demonstrative slide that included all
16
   this information and the theory of that date, and I
  believe that's --
17
18
                  THE COURT: All right. So that takes
19
   care of that?
20
                  MR. GARNETT: It does.
21
                  THE COURT: All right.
22
                  MR. GARNETT: We won't present that
2.3
   demonstrative.
24
                  THE COURT: Okay. What did we tell the
25
   jury, 1:10?
```

```
1
                  MR. PARKER: Yes, Your Honor.
2
                  THE COURT: We'll see y'all back at 1:10.
3
                  COURT SECURITY OFFICER: All rise.
                  (Recess.)
 4
5
                  (Jury in.)
6
                  COURT SECURITY OFFICER: All rise.
7
                  THE COURT: Please be seated. Where is
8
   my witness?
9
                  THE WITNESS: Sorry, sir.
10
                  THE COURT: All right. Mr. MacFarlane.
11
   Mr. Trop.
     DUNCAN MACFARLANE, Ph.D., DEFENDANTS' WITNESS, SWORN
12
13
                       CROSS-EXAMINATION
14
   BY MR. TROP:
15
             Good afternoon, Dr. MacFarlane.
16
            Good afternoon.
        Α.
17
            You told me you've never worked in the optical
18
   disk drive industry; is that correct?
19
             That's correct.
20
        Q.
            You've never been involved in the design of an
21
   optical disk drive in your life.
22
        Α.
            That's correct.
2.3
        Q. You claim you're an expert in this case, but
24
   only with the proviso that you've never designed an
25
   optical disk drive; is that correct?
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```
A. That's correct.
```

Q. Now, let's talk about your design experience in total of any type.

Am I correct in understanding in the exhibit that you put up that the total amount of design experience you've had in your life is less than three years?

- A. I don't know how you're calculating that, sir.
- 9 Q. Okay. You had -- what were the three
- 10 companies that were listed up there? Do you recall
- 11 them?

1

2

3

4

5

6

7

- 12 A. Oh, well, I worked -- I worked at Texas
- 13 Instruments; I worked at Celion Networks; I worked at
- 14 JDS Uniphase; and I also worked Schafer Associates
- 15 outside of Boston for a year after I got my master's.
- 16 Q. You left the Schafer off of that slide.
- 17 A. I believe that was off that slide, yes.
- 18 Q. Okay. So if you add all that up -- was
- 19 Schafer Design experience, too, that you left off?
- 20 A. Yes, I would say so.
- 21 Q. And how long were you there?
- 22 A. A year.
- Q. Okay. So would you -- do you think you had
- 24 more than three years total design experience of any
- 25 type?

```
Especially, if you include my research
1
        Α.
2
   activities in the laboratory, absolutely.
3
            Okay. Well, I'm talking about design.
        Q.
   you ever designed a product, other than at those three
4
5
   or four companies?
             Those are the most noteworthy events, yes.
6
7
             Now, you formed your opinions in this case
        Q..
8
   without ever talking to anyone at Quanta, except
9
   Quanta's lawyers; is that correct?
10
             That's correct, yes.
11
        Ο.
             Did you talk to anyone outside of Quanta,
   other than Quanta's lawyers, to assist you in forming
12
13
   your opinions?
14
             No, I did not.
15
             Did you review any of the depositions that
   were taken in this case?
16
            Yes, but I can't give you a complete list of
17
        Α.
18
   what I did -- what I -- what I reviewed and what I
19
   didn't.
20
        Q.
             Okay.
21
                  MR. TROP: Would you put up Plaintiff's
22
   Exhibit 140?
2.3
                  And could you turn to Page 4?
24
             (By Mr. Trop) Can you see that okay,
        0.
```

Dr. MacFarlane? It's a little hazy to me.

- A. Not at all.
- Q. Okay.

- 3 A. Okay.
- Q. So do you see any depositions listed so far?
- 5 This is the section of your report where you listed the
- 6 materials you considered, correct?
- 7 A. That's correct.
- 8 Q. And can you --
- 9 MR. TROP: Would you scan through it so
- 10 Dr. MacFarlane can take a look and see if there are
- 11 any --
- 12 A. There shouldn't be any depositions there,
- 13 because I didn't -- at that point in time that I wrote
- 14 this, I had not looked at any depositions.
- 15 Q. (By Mr. Trop) Oh, I didn't understand that.
- 16 So you looked at the depositions after you'd already
- 17 formed your opinions and had put them in your report; is
- 18 that correct?
- 19 A. Well, for example, I read my deposition, yes.
- 20 Q. Okay. Did you review any other deposition,
- 21 other than that, after you'd already formed your
- 22 opinions and written your report?
- 23 A. Not that I recall.
- Q. And before you wrote your report and formed
- 25 your opinions, you didn't look at a single deposition in

```
this case, did you?
1
             I -- if I did, I did not rely on it for my
2
3
   opinion.
4
             Did you or did you not?
5
             I don't recall.
        Α.
             Did you analyze one physical drive of Quanta
6
   at the time you formed -- you wrote your report?
8
        Α.
             No, I did not.
9
        Q.
             Did you do one test?
10
        Α.
             No, I did not.
             Did you do one experiment?
11
        0.
             No, I did not.
12
        Α.
13
             Now, you told me that you do not know how
        0.
   Quanta figures out what kind of disk is in their drives;
14
15
   is that correct?
16
             That's a fair statement, yes. I did not do
        Α.
   the source -- I did not do a full source code analysis
17
18
   to determine that.
19
             You deliberately did not figure out how this
20
   was done; is that correct?
             It was not part of what I was asked to do, no.
21
        Α.
22
             So you deliberately did not figure out how the
   Quanta drives work; is that correct?
23
24
             It was not -- it was not part of what I was
25
   asked to do; that's correct.
```

```
THE COURT: Well --
1
2
        Α.
             That's correct.
3
                  THE COURT: He just asked you a question.
   You could either answer yes or no, letting you know what
4
5
  you did or didn't do deliberately, I think, can't you?
                  THE WITNESS: Yes, sir. Yes, sir. Yes,
6
7
   that's correct.
8
                  THE COURT: All right.
9
        Q.
             (By Mr. Trop) You did not study the operation
   of the drives extensively; is that correct?
10
             That's correct.
11
        Α.
             You did not do any oscilloscope traces of the
12
        Q.
13
   type that Dr. Howe did, did you?
14
             That's correct.
        Α.
15
             You did not review any of the drives like
16
   Dr. Howe did, did you?
             That's correct.
17
        Α.
18
             You didn't do a full source code analysis for
        Q..
19
   any drive; is that correct?
20
        Α.
             That's correct.
21
             You've never done a full source code of an
   optical disk drive in your life; is that correct?
22
2.3
        Α.
             That's true.
24
             Now, with respect to your -- your opinions on
        0.
25
  non-infringing alternatives, did I understand you
```

```
1
   correctly to indicate -- well, strike that.
2
             Did you tell me you did not analyze in your
   report the cost of any of those non-infringing
3
   alternatives that you pointed out?
4
5
             I would say that's true.
        Α.
             And you told me in your report you did not
6
   look at the commercial availability of any of those
8
   alternatives; is that correct?
9
        Α.
             That's correct.
10
             And am I correct that you also did not tell
   me -- or strike that.
11
12
             Did you also tell me that you did not look at
13
   the ability of any of those alternatives to distinguish
14
   between CDs and DVDs?
15
             Not -- not in any precise detail, no.
16
        Q.
             Okay. And is it correct that you told me that
   you do not know how Quanta designed its parts?
17
18
        Α.
             That's -- that's correct.
19
             And were you aware that Quanta contends that
2.0
   it does not know how its drives with Philips controllers
21
   work?
22
             Could you repeat that again, please?
        Α.
             Were you -- are you aware that Quanta contends
2.3
24
   that it does not know how the drives that it sells that
25
   have the Philips controllers, it does not know how they
```

work? 1 2 That -- that's probably -- I -- I might have 3 run across that statement in -- in some of the material I reviewed. With that -- with that, I'll say yes. 4 5 Now, wouldn't that -- you also testified in direct that Quanta could have modified its drives. 6 7 Is that -- did I understand you correctly? 8 They could have. Absolutely. Α. 9 Wouldn't it be a problem to modify the drive Q. 10 if you don't even know how the drive you already has --11 you already have works? There are -- that's a fair statement, yes. 12 Α. 13 Okay. And you mentioned some experience you 0. had with source code. You knew how those products work, 14 15 didn't you? 16 Α. Yes, I did. And are you surprised that Quanta would 17 Q. 18 contend that it doesn't know how its own products 19 operate with respect to disk discrimination? 20 I really don't feel comfortable saying what Quanta knows or doesn't know. That's -- that's -- I 21 guess that's -- I guess that's where I'm hesitating. 22 Are you -- were you surprised to learn that 2.3

Quanta contends that it does not know how its drives

with Philips controllers operate?

24

```
A. I guess I really don't know enough about the business model of Quanta to -- to say yes or no.
```

- Q. Okay. I'm asking for your own personal reaction, when you learned that Quanta contends that it doesn't even know how its own drives operate.
- A. If they are -- if they are just a contract manufacturing house, it's quite possible that that's -- that's the case. I don't -- I just don't know enough about their business model to -- to talk about -- about the details of Quanta.
- Q. But, Dr. MacFarlane, if they're just a contract manufacturing house, how could you have opined that they could have easily modified their drives?
 - A. Because modifying source code is easy.
- Q. Well, if it's so easy to modify the source code, then shouldn't -- wouldn't you need to understand how the source code operates to modify it?
- A. Again, I really don't -- I really don't have any firsthand knowledge of -- of Quanta's business knowledge or what they know or not -- don't know.
- THE COURT: Well, but you're -- you know whether or not you need to know about the source code, if you're going to modify it.
- THE WITNESS: Oh, yes, yes. That's absolutely true, Judge.

2

3

4

5

6

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

2.3

24

```
You should -- before you modify the source
     Α.
code, you should know what you're doing with this
product.
     0.
          (By Mr. Trop) Okay. Thank you.
          Now, you don't know what level of skill or
experience the engineers at Quanta have, because you
never talked to any of them; isn't that correct?
     Α.
          That's correct.
     Q.
          And you never read any of their depositions
either, did you?
          That's my recollection, yes.
     Α.
     Q.
          Now, with respect to the level of skill, you
opined about the level of skill even though you yourself
have no experience whatsoever in the design of optical
disk drives; is that correct?
     Α.
          That's correct.
               MR. TROP: Let me check real quick here.
               No further questions.
               MR. PLATT: Nothing further.
               THE COURT: All right. You may step
down, Dr. MacFarlane.
               Who will be your next witness?
               MR. PARKER: Brett Reed will be our next
witness, Your Honor, and Mr. Garnett will inquire.
               THE COURT:
                           Okay.
```

1 (Witness sworn.) 2 BRETT REED, DEFENDANTS' WITNESS, SWORN 3 DIRECT EXAMINATION BY MR. GARNETT: 4 5 Good afternoon. Q. Would you please introduce yourself to the 6 7 Court and to the jury. 8 Α. Yes. My name is Brett Reed. I'm from Los 9 Angeles, California. 10 And what is your area of expertise? I'm an economist, and I specialize in patent 11 12 infringement damage and other types of damages in cases 13 such as this. 14 And would you please describe your educational 15 background? 16 Sure. I do have a slide -- there it is -- of Α. 17 some of my background. But I have a Master's degree in 18 economics from the University of California-Los Angeles, 19 or UCLA, and I did my undergraduate education at 20 University of California-Irvine. 21 Ο. And before this case, did you have any experience with the optical disk drive or ODD industry? 22 2.3 Yes, I did, and, more generally, in the 24 computer industry. Again, the slide indicates some of

the companies with which I've worked or matters in which

And I analyze it more from a standpoint of an economist, looking at competitive aspects, being concerned about the consequences of royalties to a company in the industry. And in that sense, I -- I don't negotiate license agreements like Mr. Murtha. I sometimes consult with attorneys who are negotiating in what I'm calling in a room next door or maybe on the end

22

23

24

```
1
   of the phone, consulting with the attorneys who
2
   typically negotiate the license agreements.
3
             But I myself don't sit at a table negotiating
   license agreements.
4
5
             Does your work give you access to license
6
   agreements?
7
        Α.
                   That's what I hinted to a moment ago.
             Yes.
8
   The interesting thing for me about my job is I get
9
   access to documents produced by both sides of a case.
10
   So if I'm involved in a case between MediaTek and
   Panasonic, for example, I get access to the license
11
12
   agreements of both sides, including all the underlying
13
   negotiating documents to the extent those are produced
14
   in cases, and I can look and see what the issues are
15
   that were being considered by the parties, and,
16
   ultimately, how they came to the conclusions about the
17
   royalty rates that they agreed to.
18
            Mr. Reed, what were you asked to do in this
        Q.
19
   case?
20
             In this case, I was really asked to do two
21
   things. One is to critique the analysis of Mr. Murtha
   and his conclusion on a reasonable royalty rate.
22
2.3
             And then second, also, to do my own analysis
24
   of the Georgia-Pacific Factors and come up with a
25
   conclusion on a reasonable royalty for Quanta to pay to
```

```
LaserDynamics in the event that the jury finds that the
1
2
   patents are valid and infringed by Quanta.
3
             Sir, if the jury determines that
   LaserDynamics' patent is not infringed by Quanta, would
4
5
   your opinion apply in this case?
             No. My work would be -- would not be relevant
6
7
   at all.
8
             And would you please describe the materials
        Q.
9
   that you considered in the course of your work?
10
             Yes. I considered a wide range of materials,
11
   including depositions from this case; license agreements
12
   produced in this case, of course; sales documents
13
   produced by Quanta entities, QSI and Quanta Computer;
   also market data; market research; information on market
14
15
   shares; and public information and license agreements.
16
        Q.
             And what type of license agreements did you
   review in the course of your work?
17
18
             There are really four categories. License
19
   agreements that were entered into by Quanta Computer;
20
   license agreements that were entered into by
21
   LaserDynamics, which you've heard some about already;
22
   license agreements that were entered into by QSI, Quanta
23
   Storage; and then as I mentioned a moment ago, the
24
   public documents that give rise to information about
25
   licensing generally in the ODD industry, more generally
```

1 relating to things like chipsets, and also the computer 2 industry. 3 Would you explain what kind of publicly Q.. available agreements you reviewed? 4 5 Sure. There are a wide range of very large, Α. important companies that have been engaged in the ODD 6 industry or the DVD industry, and have been so for about 8 10 years or more. 9 And in many cases, information relating to the 10 licensing programs of those very significant companies 11 are made public. And one can go to the website, for 12 example, of Philips and see the license agreements that 13 are offered both -- both for the Philips patents individually and also as Philips administers the 3C 14 15 group, which you've heard of, I think, earlier in this 16 trial. 17 The 3C is a group of companies that entered 18 together into a pool, sometimes called a patent pool,

The 3C is a group of companies that entered together into a pool, sometimes called a patent pool, and they license hundreds of patents together in one place.

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And I've analyzed the information about companies like that from their websites, looking at royalty rates, for example, but also other public information that is often reported about dealing with the royalty situation in the ODD industry.

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1 So you mentioned that you worked in the Q. computer and ODD industries. 2 3 Would you give the jury some background on those companies in that industry? 4 5 Sure. I prepared a chart that kind of gives a Α. background about the ODD industry and the DVD industry. 6 And the top part of that chart shows the founders of the 8 DVD forum. These are considered, really, the companies 9 that promoted DVD, that introduced the -- the 10 technology. Much of it was patented that made DVD 11 possible. 12 And they include names we've heard and names 13 that are probably familiar to everybody here: Toshiba, Panasonic, JVC. Time-Warner was involved in the 14 15 development of DVD, Mitsubishi, another company that ultimately also purchased patents in the DVD space from 16 IBM. 17 18 And the color there is Philips. And Sony, of 19 course, we've heard a lot about them. Tomson is another 20 company that was involved. 21 And the lower part of the chart shows that ultimately these companies that started working with DVD 22 introduced a lot of technology, received a lot of 23 24 important patents. They formed into these patent pools 25 to license their technology, their patent technology.

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1
             And they -- they focused on licensing the
   patents that were viewed as essential to manufacturing
2
3
   the DVDs. Sometimes the companies would have more
   patents, but only the essential patents would be part of
5
  these pools.
             And you can see the 6C pool started out with
6
7
   six companies. That's the 6C, and was headed by
8
   Toshiba, included Panasonic, Hitachi, other companies as
9
   well. Ultimately, Toshiba bought the IBM DVD-related
10
   patents, or at least certain of them, and Sharp, Sanyo,
11
   and Samsung also joined.
12
             So now, 6C represents the patents of ten
   companies, and it's quite a large set of important
13
14
   patents.
15
             3C is a similar situation administered by
16
   Philips. Sony and Pioneer were initially in it. Later,
17
   additional companies like LG Electronics. And for
18
   certain types of drives, like recorders, HP patents were
19
   included.
20
             And I think in some areas, there's also Ricoh
21
   was involved, but, generally, it's the Philips, Sony,
   and Pioneer group.
22
2.3
        Q.
             Before this --
24
             I'll just finish with one last thing.
        Α.
25
        Q.
            Certainly.
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At the bottom, Tomson is one of the original Α. DVD forum companies that didn't join one of those pools, but it separately licensed its patents and is well-known, a lot of public information about Tomson's 5 efforts. And there's another company that was active in licensing relating to DVD called Nissim. And there's 8 also a lot of public information about Nissim, its efforts to license, the number of companies that it has 10 licensed. And that's other public information that's available. 11 12 Q. Before this case, had you heard of 13 LaserDynamics? No, I hadn't. And before we get into the details of your 16 opinion, would you please summarize for the jury what you believe would be a reasonable royalty in this case? 17 Yes. And I believe I have a chart that shows 19 the high-level summary, but it's quite simple. 20 In my opinion, a reasonable royalty 21 negotiation that gave rise to a decision of the amount that Quanta would pay to LaserDynamics for what I view 22 to be a three-year term, from August of 2006 through 23 24 approximately today, because that's the appropriate time 25 period for -- for the evaluation of damages as I

1 understand it. The reasonable royalty would be \$500,000. 2 3 Now, your 500,000-dollar number is quite Q. different than Mr. Murtha's 52-million-dollar number. 4 5 Would you provide the jury with a preview of your critique of Mr. Murtha's number? 6 7 Yes. And I'll get into more detail, but I Α. 8 prepared a chart that I think shows at a high level what 9 the difference of opinion is. And, again, I'll get into 10 more detail later. But this chart shows the activity of licensing 11 12 of these major companies in the DVD and ODD space. And 13 if we look at the chart, I put check marks for where -what the activities are -- of the companies or the 14 15 groups, whether they license their patents as a percentage royalty applied to an ODD, whether they do a 16 17 per-unit royalty that applies to an ODD unit. 18 And also, I put on there whether companies 19 with ODD patents ever license their patents based on a 20 percentage royalty applied to a personal computer or a notebook computer. 21 22 And you can see, none of the companies have 2.3 licensed their ODD patents where the percentage royalty 24 would apply to a personal computer. Even the most 25 powerful groups of patent holders, like 3C and 6C and

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Sony and Philips and Panasonic, they license as a percentage royalty applied to the drive, the cost of that drive or the price of that drive. And, in fact, LaserDynamics is -- is somewhat unusual, in that they were licensing in the same time period that these other groups and companies were, but they didn't license on a per-unit basis or a percentage royalty basis. They used a lump sum approach. And now, Mr. Murtha is asking the jury to conclude that instead of lump sum, it should be a percentage royalty, not on an ODD drive but on the entire computer. And that's the basis of the large difference in his 52-million-dollar number and what I think is a reasonable royalty. Sir, are some of these ODD companies also involved in the computer industry? Α. They are. And that kind of highlights my previous point. These four highlighted line entries here represent companies that manufacture personal computers or notebook computers. Toshiba, the head of the 6C group, Hewlett-Packard, Sony, and Panasonic all manufacture personal computers. And yet, when they were licensing the patents related to ODD technology or DVD technology, they

licensed based on the price of that drive, not on a

27000 29 1 personal computer. 2 Mr. Murtha is also opined that a 6-percent 3 royalty should be applied to the price of the ODD. Do you agree with that? 4 5 I also disagree with that. I think it's much Α. too large of a royalty to apply to an ODD price. 6 7 And, again, later I'll get into more details 8 as to why I believe that. 9 How did you reach your conclusion that the 10 reasonable royalty in this case should be \$500,000? Well, like Mr. Murtha and like my analysis in 11 12 every other project I've worked on, I did a 13 Georgia-Pacific analysis. I considered the same 15 14 factors which -- which relate to licensing issues, 15 economic issues, financial issues. 16 And I -- and I evaluated those factors to come up with what would be a reasonable royalty. 17 18 Are there any assumptions you make as part of Q.. 19 your Georgia-Pacific analysis? 20 Α. Yes, there are. 21 First of all, I assume that the jury has already determined the patent is valid and infringed, or 22

that the parties understand that at the time of this hypothetical negotiation.

So there's no question between the parties

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about whether the patent, in fact, would be infringed if 1 2 the company manufactured the products that were accused. 3 And then the second part would be this whole concept of the hypothetical negotiation, that the two 4 5 parties would sit down before the infringement began, and negotiate what a reasonable royalty would be, taking 6 into account these economic, financial, and licensing 8 issues. 9 0. And Mr. Murtha discussed the Georgia-Pacific 10 Factors. Did you also consider the Georgia-Pacific 11 Factors in your analysis? 12 Α. Yes. As I just mentioned, I considered all 15 13 factors. In many cases, the difference in my views and 14 15 Mr. Murtha's views for particular factors are not that 16 significant. But in particular areas, there are very 17 significant difference. 18 So to avoid repeating to the jury all the 15 19 Georgia-Pacific Factors, let's focus on those factors 20 which you found most important to your analysis. 21 Okay. I would start with -- with Α. Georgia-Pacific Factor 1, which is the licensing 22 activity and the royalty rates associated with the 23 patent owner -- in this case, LaserDynamics -- looking 24

for information that's pertinent to what it actually

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received, when it licensed its patent in this case, not
1
   only the '981 patent but other LaserDynamics' patents.
2
3
             And did you summarize the LaserDynamics'
  non-settlement license agreements?
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5
             I did. It was a chart from my original expert
        Α.
  report that was, I believe, also used yesterday by Mr.
6
  Murtha in his testimony.
8
             I have a slide. Yeah, that's my -- that's my
9
   exhibit from my expert report.
10
             That shows, essentially, a timeline of
   these -- these non-settlement license agreements that
11
12
   were entered into by LaserDynamics and with some of the
13
   largest companies in the ODD space.
14
             We can see again these DVD forum companies,
15
   like Toshiba, Pioneer, Hitachi, Sony. And it spans
   approximately four years from -- from Toshiba at the
16
17
   beginning up to NEC at a later time period.
18
             Well, is there any correlation between the
        Q.
19
   license rates and time?
20
        Α.
             I don't believe so. I think this chart shows
21
   there is not. One of the things I was interested in
22
   looking at is whether there was a change in the
   licensing approach, or after -- I analyzed what happened
23
24
   after LaserDynamics received the initial $1 million in
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the early period, whether that might have changed the

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1
   way they approached things.
2
             But you can see NEC, which is a very large
   company that manufactured ODD drives, and Toshiba at the
3
   beginning, that four years' span between them,
4
5
   approximately four years, and very similar amounts were
   being received by LaserDynamics.
6
7
             And does this chart reveal any information
        Q.
8
   about LaserDynamics' licensing policies?
9
        Α.
             Well, I think it does. I think it reveals
10
   that LaserDynamics, as it was licensing a very large
   portion of the industry, always was -- was willing to
11
   accept a lump sum royalty. And those lump sum royalties
12
   fell within the range of 50,000 to about $250,000.
13
14
             So far you've only discussed LaserDynamics'
15
   license agreements.
16
             What about the other license agreements that
   you looked at in the course of your work?
17
18
             Well, for example -- and I mentioned them.
19
   have a slide that summarizes -- summarizes this with
20
   quite a bit of information, so please bear with me.
21
        0.
             Well, why don't we -- why don't we start on
   the left side first, then.
22
2.3
             Okay. If you can highlight that top part.
        Α.
24
   That's great.
```

So this relates to Georgia-Pacific Factor 2,

which are the royalty rates paid by -- by the potential hypothetical licensee; in this case, the Quanta entities. And -- and these show the royalty rates that were paid by or agreed to be paid by license agreements by Quanta Storage, QSI. REDACTED BY ORDER OF THE COURT So here, we're getting down to a smaller group of patents rather than the very large sets. And what kind of royalties do we see when we're looking at a small set of important patents.

REDACTED BY ORDER OF THE COURT

Let's go back to the full chart, and if you would explain the right column in this chart.

THE WITNESS: Could you highlight the first two would be -- that's great. Thank you.

A. So public information about royalty rates, I believe, are associated with Georgia-Pacific Factors 12 and 13. And those factors really ask about, how is patented technology compared to other technology, typically licensed in the industry or in related industries.

And one of the places I started was looking at the 3C and 6C patent licensing experiences. And as I mentioned before, 3C and 6C involve very large numbers of companies with important backgrounds in the ODD industry. They license very large numbers of patents.

6C publicly states that they have over 100 patent families, and a patent family can include many U.S. patents and many overseas patents as well. And the 3C patent pool is also a very large number of patents.

25 And their licensing program has been and has

```
35
   always been 3.5 percent of the ODD price, in the case of
1
2
   the 3C patent pool. There also are royalty minimums or
3
  maximums that apply. In fact, over time, the maximum
  has actually been reduced, because as prices fell, these
4
5
  licensors recognized that they had to drop their maximum
6
  royalty amount.
7
             The 6C patent pool is licensed at 4 percent of
8
  the ODD price royalty, again, for 10 companies. And not
9
   only the issued patents but other potential future
10
  patents that are essential that are issued to the
11
   companies that belong to that group.
12
                  MR. GARNETT: And the bottom part of the
   right column?
13
14
             (By Mr. Garnett) Could you explain that,
        0.
15
  please?
16
        Α.
             Yes. So this is continuing with additional
   public information. As part of my ongoing research in
17
18
   the ODD industry and more generally in the computer
19
   industry, I track and follow information about rates.
20
             And as I mentioned earlier, Nissim is a
21
   company that's involved and has patents in the area of
22
   parental control and DVD and other areas as well. And
   Nissim has been actively involved in licensing very
23
```

publicly identifying when it licensed a company and what

24

25

the company pays.

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27007
                                                           36
             They licensed Microsoft not too long ago, and
1
   their royalty structure was initially 25 cents. And
2
  then they were issued a couple of additional patents,
3
   and they -- they raised their rate going forward to --
4
5
   to -- by an additional 12 cents. So for those
   additional patents, it's kind of a similar point to what
6
7
   I was talking about with Hewlett-Packard.
8
             For the additional patents, a relatively small
9
   group, they charge an additional 12 cents.
10
                  MR. GARNETT: Can we have the full slide
11
   again?
12
            Well, I should move to the middle part below
13
   that.
14
        Ο.
             (By Mr. Garnett) I'm sorry. I didn't mean to
15
   interrupt you.
16
             That's okay. I'm moving too slow perhaps.
        Α.
17
             No, not at all.
        0.
18
             The -- the next group is public information
19
   that I've researched over many years, relating to
20
   royalties for chipsets. If you remember my first slide,
   I worked on many matters involving companies that make
21
22
   chipsets.
             They're semiconductors. They're used as
2.3
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really the brains of devices, so like a DSL chipset,

which is in the case of Texas Instruments. They

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invented the key technology that's used for most of the DSLs that we probably all have in our home. And they've licensed that to most of the companies that manufacture these chipsets that are used in DSL modems. And public information made it available for me to -- to -- to use this information. Instruments was charging about 2 percent, according to a Texas Instruments employee who testified in court about what they actually did. And Rambus is another company that has been very active in licensing technology both related to DRAM, which is memory for a PC, and also DRAM -- the technology that's used for DRAM controllers that are controllers in personal computers that interact with memory. And Rambus has publicly stated that they've licensed their patents for a range of .75 percent to 3.5 And importantly, this applies to the chipset percent. price, not the price of a DSL modem, not the price of an ODD drive, but to the chipset that is part of the brains of that product. We've heard Dr. Howe discussing in this case where he was analyzing the chipset and the source code for that chipset. And -- and in this case, the --

there's information about the chipset value, and one can

```
1
   look at these types of royalty rates to -- to get
2
   another benchmark.
3
             And then the last entry is information that
   was available between a term sheet between Sony and Asus
4
5
   that was produced in this case where Sony said, we have
   our essential patents; these are the patents related to
6
   3C; we'll license you those essential patents for
8
   2 percent, but we have additional useful patents.
   you would like to take a license to that, we'll charge
10
   you 2.1 percent.
             So an additional .1 percent for these
11
12
   additional useful patents. It's another important
13
   observation about what happens when a smaller set of
   patent technology is licensed in the industry.
14
             Mr. Reed --
15
        Q.
16
                  MR. GARNETT: Could we have the full
17
   slide?
18
             (By Mr. Garnett) That was a lot of
        Q.
19
   information. Could you remind the jury which of these
20
   license agreements you think would not be a good
21
   benchmark for your work in this case?
22
             Well, in a nutshell, it would be the
        Α.
   agreements that involve very large number of patents,
2.3
24
   like the 3C, the 6C, the Sony, the Panasonic.
25
            And I have a slide that comes from my report
```

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39
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that shows the number of patents associated with Sony
1
   and -- and Philips. So this came from my first expert
2
  report, and it lists -- this is from the public website
3
   of Sony and then also from Philips that show -- and I
4
5
   actually had to go through and count them, because they
   don't give you these summaries, but they list the
6
   patents, and they list it by category.
8
             So, for example, under Philips, the first
9
   entry is for DVD plus RW plus R, recorder technology.
10
             And so for a company that would be
   manufacturing that type of drive, there would be 40 U.S.
11
12
   patents and 278 non-U.S. patents that Philips by itself
13
   owned and were viewed essential to that particular type
   of DVD device.
14
15
             And you can see the listing for all these
16
   different categories. There's a large number of
17
   patents. I have to say that there's some overlap across
   these, but it's a very large number of patents.
18
19
             For Sony, also at the top, you can see there
20
   are two categories with 50 U.S. patents and 300 non-U.S.
21
   patents.
22
                  MR. GARNETT: Could we go back to the
23
   previous slide?
24
             (By Mr. Garnett) And, sir, would you remind
        0.
25
   the jury which of these license agreements you think
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would be a better benchmark for your work in this case?

A. I think the important benchmark is looking at a smaller group of patents and -- and I mentioned three specific and then also the chipsets.

But the specifics would be the additional dual-layer Hewlett-Packard technology that had the 25-cent per-unit royalty; the information from Nissim for the additional patents, 12 cents per unit; the Sony experience with 21 percent for the additional useful Sony patents; and then also the chipset patent licensing where those chipset patent -- patented technologies were licensed very broadly to a large number of firms that -- that were using that technology.

- Q. Okay. Let's move on to another Georgia-Pacific Factor.
- What is Georgia-Pacific Factor 5?
- A. Georgia-Pacific Factor 5 is the commercial relationship between the parties. And Mr. Murtha and I both agreed that -- that the relationship is not a competitive one.

LaserDynamics is interested in licensing its technology, but the difference between Mr. Murtha and my analysis is that I recognize that because LaserDynamics has licensed most of the industry, LaserDynamics would not receive royalties from -- from other companies, if

```
27012
                                                            41
1
   Quanta Computer was to use the drives manufactured by
2
   those companies.
3
             So LaserDynamics, in order to get additional
  royalty income from Quanta Computer, would want to be
4
5
  realistic and reasonable so that otherwise Quanta isn't
   forced essentially, as Mr. Davis said, to -- to buy from
6
   other drive manufacturers where Quanta or its customers
   would not be subject to a -- to a large per-unit
8
9
   royalty.
             What companies could Quanta Computer buy
10
   licensed drives from?
11
             Well, there's, again, from my first expert
12
        Α.
   report, a slide I had prepared that -- that showed --
13
14
                  THE WITNESS: If we can do the top part
15
   of this, please.
16
                  If you can move that -- okay. That's
   fine.
17
             This shows the -- the different ODD
18
19
   manufacturers that were actually selling drives to
20
   Quanta Computer, the top part does.
21
             The bottom part shows additional drive
   manufacturers where the Quanta Computer records did not
22
```

show that they were purchasing the drives. But there

are a large number of drive manufacturers, and these are

major companies like -- like NEC, which we talked about

23

24

before.

2.4

Gold Star is part of -- like -- Gold Star was the old Lucky Gold Star, which is now LG Electronics; Sony, of course, Pioneer, Philips, Toshiba, and TEAC.

So Quanta Computer is already buying drives from these

REDACTED BY ORDER OF THE COURT

So if Quanta was presented with -- with a demand for a per-unit royalty, even if the royalty wasn't that large, Quanta is constantly working to try to save pennies so that it can drop the price of its products for companies like Dell, to make it more affordable for us.

And if Quanta was told, we want you to pay -by LaserDynamics, we would like you to pay us 12 cents,
15 cents per unit, let alone 6 percent of an ODD price,
or 2 percent of the computer price, Quanta would turn to
these other companies, like Toshiba, and say, please
sell me more units. I can't afford to buy from Sony.
And at the same time, Sony would want to react to that
by finding a way to get units to Quanta Computer. So
that's a very important fact that I don't believe Mr.
Murtha has considered appropriately.

Q. So would Quanta Computer buy a drive that was

above market price due to a high royalty?

A. I don't believe so at all. We saw numbers like \$28 as the average price of a drive. And then we also saw or heard about royalties that were being suggested of \$16.

So Quanta would -- Quanta Computer would have the choice of buying a 28-dollar drive from Toshiba, a large company that can produce a very large quantity, or if they bought through Sony Optiarc or QSI, they'd have to pay \$28, the cost of the drive, plus a royalty of 14 or \$16. It wouldn't happen.

And this is a factor that would be part of the negotiation between Quanta Computer and LaserDynamics.

Quanta would say, look, LaserDynamics, if you want it, get some additional money here, you should be reasonable, because otherwise you're going to force me to buy from these others, and you won't get anything.

- Q. And based on your analysis of these

 Georgia-Pacific Factors, what did you ultimately

 conclude would be a reasonable royalty for Quanta to pay

 LaserDynamics in this case?
- A. Well, ultimately, I concluded that the number I already spoke to, 500,000. But I do have a chart that summarizes the information, this high-level information I considered.

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And -- and on the LaserDynamics' side, I've
listed here 16 LaserDynamics non-settlement license
agreements, all ranging between 50,000 and $250,000, all
lump sums.
          Also, the point that LaserDynamics would not
get additional royalty income if it didn't come to
reasonable terms with Quanta Computer.
          And on the QSI/Quanta side, there's a number
of options that were available, but foremost among those
are what I just talked about, that Quanta -- Quanta
Computer would look to these other drive manufacturers,
if the royalty was too large.
          And QSI would also consider options, and one
of the options that I focused on was they could buy
chipsets from a licensed chipset supplier. And so in
consideration of that and also looking at the three-year
timeframe, I thought $500,000 is a good measure of a
reasonable royalty.
         Mr. Reed, did you do a check on the
reasonableness of your conclusion?
     Α.
          Yes, I did. I prepared a chart again that
summarizes -- summarizes this information.
          And the top part, I've addressed already that
I certainly made a reasonableness check to say, let's
look at what actually happened, the license agreements
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that were entered into with royalties between 50,000 and 250,000 that covered the life of the patent. So it's not a three-year term. It's however long the patent and the patent families might -- might be -- be active. And that could be 20 years or longer, depending on when certain patents that are included in the license get issued, because they might not all be issued already. And then another important difference is, this 10 is a license for -- this hypothetical license is a license for just the '981 patent, not Japanese patents, 12 not other patents that are owned by LaserDynamics. So comparing the \$500,000 to the 50,000 to 250,000 range, considering the difference in the term, the 15 number of patents, the coverage of the patents, I believe 500,000 is reasonable. And then the lower part goes back to those benchmarks I was talking about. What happens when we 18 19 take the royalty base associated with LaserDynamics' 20 calculations of how many units are at issue in the damage period here. REDACTED BY ORDER OF THE COURT

REDACTED BY ORDER OF THE COURT

The next entry, Nissim, an additional 12 cents, which is a fairly large royalty rate. A lot of

And then finally, if we look at the chipset value and we apply a 1- to 2-percent range, which I got from evaluating the Rambus and the -- and the Texas

Instruments' royalty rates for chipsets, and then apply it to the -- to the chipset value of the ODD, which I based on a 3-dollar value as the chipset part of that

Q. Let me ask you one last question about your approach.

Have you ever applied a lump sum royalty
payment in other patent cases?

A. Yes, I have. In some cases, it's appropriate. In other cases, it's not.

When the evidence is that's the way the company that's licensing its patents does it suggests that, that lump sum makes sense. That's an important factor.

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1
             If the industry more generally did it that
   way, that's an important factor.
2
3
             If the evidence of what is the cost of the
   alternatives suggests that it should be a lump sum
4
5
   because the alternatives are quite viable, then all
   those reasons give rise to what I think appropriately
6
7
   would be a lump sum royalty.
8
             Let's turn back to your critique of
9
   Mr. Murtha.
10
             What would be the effective royalty rate, if
   you applied Mr. Murtha's or LaserDynamics' damage
11
   demand?
12
13
             I'm not sure I understand, but you might be
        Α.
   asking about a calculation I did summarizing
14
15
   Mr. Murtha's analysis.
16
        Q..
            Yes.
        Α.
17
             And that's a slide that I prepared.
18
             So this summarizes Mr. Murtha's conclusions
19
   applied to Mr. Davis' calculations, and I don't have --
20
   I should say I only have very minor issues with
21
   Mr. Davis' calculations. By and large, he did a fine
   job putting together the information.
22
2.3
             So I'm focusing on, really, the issue from the
24
           REDACTED BY ORDER OF THE COURT
25
```

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1
   of the damage amount is associated with the
2
   approximately 14-dollar-per-unit royalty, because it's
3
   2 percent of the computer price.
             And only 0. -- .0367 percent is associated
4
5
  with the 6-percent royalty.
             And then finally, if you look at the bottom,
6
7
   if you take that 14-dollar amount and compare it to the
   price of an ODD drive, it's a 50-percent royalty rate.
9
   It's unheard of.
10
             Is Mr. Murtha's 6-percent royalty rate on the
11
   price of the ODD reasonable, in your opinion?
12
             No, I don't believe so. And, again,
        Α.
13
   comparison to the actual benchmark rate suggests --
   indicates why it's not reasonable. 6 percent is very
14
15
   large compared to -- to the licensing history in the ODD
16
   industry.
17
             And, again, I have a chart that compares
          So this shows on the one side the LaserDynamics
18
   these.
19
   royalty demand, 6 percent of the ODD revenue. As I just
20
   showed, though, this reflects only a very small part of
21
   the total damages. But even this -- this rate is too
   large.
22
2.3
             So if we compare it to the rates of Sony,
24
   TEAC, Panasonic, the 3C patent pool, the 6C patent pool,
25
   this royalty rate of 6 percent for one patent is larger
```

```
1
   than the rates for the entire patent portfolios and
2
   patent pools of these other groups.
             If we compare it to the rates for the chipsets
3
   and we take into account the chipset value, about $3
4
5
   compared to a 28-dollar value of an ODD drive, we'd have
   to adjust the royalty rate to make them comparable.
6
   But then we're comparing 6 percent of the ODD versus for
8
   these chipset companies a royalty of 0.1 percent or 0.4
9
   percent. So Mr. Murtha's royalty is at least 20 times
10
   too large compared to that benchmark.
             And then finally down below, again, you can
11
12
   see the royalty that -- it was shown at opening, as I
13
   believe it was stated, the royalty that was -- that
   LaserDynamics was asking the jury to award, $1.69.
14
15
             Of course, that doesn't relate to many
   products actually being claimed in this case, 0.03
16
17
   percent, but if it was, this chart, I think, shows even
18
   that $1.69 is unreasonable compared to the 25-cent
19
   Nissim rate, the additional 12 cents for the additional
20
   Nissim patents, the dollar and the additional 25 cents
21
   per dual-layer patents charged by Hewlett-Packard.
22
             So I believe this shows that the 6 percent of
23
   the ODD price is not a reasonable royalty.
24
             What would happen to Quanta Computer's
        0.
25
   profitability if it had to pay 2 percent of the computer
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50 price to LaserDynamics? Well, first of all, I don't believe that could If that was the result of the hypothetical negotiation, Quanta Computer would have to buy drives from -- from another supplier or have its customers buy drives from another supplier to avoid the royalty. They would turn to Toshiba; they would turn to Pioneer. But if for whatever reason Quanta Computer did have to pay the 2 percent, it would take away their operating profit on every drive that was subject to -on every drive and computer that was subject to that REDACTED BY ORDER OF THE COURT an opportunity to raise prices. It's a very competitive industry. They would have to look to other drives. 0. So would you summarize for the jury your major critique of Mr. Murtha's opinion in this case? 22

First, the use of the 2 percent of

the -- of a notebook computer price, there's no

precedent for it. It results in a 14-dollar royalty

```
51
1
   that's effectively a 50-percent royalty rate on the
2
   drive.
3
             It doesn't make any common sense, given the
   realities of the industry and the competition in the
4
5
   industry. And I prepared a chart that would -- just
   summarizes the overall results.
6
7
             So this shows -- the first blue bar is the
8
   royalties that LaserDynamics actually received in its
9
   nonsettlement agreements ranging from 50,000 to
   $250,000.
10
11
             The second bar or arrow, if you will, shows,
12
   with a scaling adjustment, because it had to be scale
13
   adjusted, $52 million is what they're claiming for the
14
   three-year time period.
15
             And then finally, if you can add the next bar,
16
   what I believe is a -- a reasonable royalty, $500,000,
17
   for Quanta Computer to pay to LaserDynamics in the event
   that the patents are found to be valid and infringed.
18
19
             So, in your opinion, is LaserDynamics damage
20
   demand off the charts, Mr. Reed?
21
        Α.
             Well, yes, that's a way of putting it.
   believe that there's no basis for this 52-million-dollar
22
```

- 23 number.
- 24 And would you remind the jury what you would 0. 25 consider to be a reasonable royalty in this case?

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2.3

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Q. I stand corrected.

Given the time period at issue here and the Α. facts at issue in this case, 500,000, in my opinion, is a reasonable royalty. 0. Thank you. MR. GARNETT: I pass the witness. CROSS-EXAMINATION BY MR. LUCK: Hello, Mr. Reed. Q. Α. Hello, Mr. Luck. How are you? Remember, I took your -- the deposition in Los Angeles in March or April of this year? April, yes. Α. Is it my understanding of your opinion in this case that in light of QCI's sale in the United States of REDACTED BY ORDER OF THE COURT is your opinion that your client would only pay \$500,000? Is that correct? Α. Yes. Now, you say you have some experience in ODD technology; is that correct? Α. Well, you say ODD technology. I think I described it as the ODD industry, looking at the economic licensing and financial issues in that industry.

2.3

Is that due in part to the fact that you have been an expert for these Defendants on three prior occasions?

- A. Well, I believe only in one prior occasion was I working with QSI. Other cases involved computer industry technology, but also because I've worked on several matters with Panasonic as well.
- Q. I understand that you said that you have very little issue with the -- the royalty base; is that correct? I believe you said Mr. Davis did a good job in that; is that right?
- A. I believe Mr. Davis did a fine job. The only disagreement I had with him was dealing with the indirect units, which were a relatively small part of the ultimate damage number.
 - Q. Am I correct in understanding the entirety of your report in this case -- I'm sorry -- the entirety of your opinion in this case are in your two expert reports?
 - A. I would say yes, but also there was some additional exhibits that were prepared reflecting changes that took place in LaserDynamics' analysis.
 - Q. They were not in your report?
 - A. Well, the information is in my report, but,

(By Mr. Luck) Nevertheless, you claim that if

you analyze the highs and the lows from this and account

24

25

0.

```
for the duration, you're still in the ballpark of the
1
  numbers here (indicating) in these --
2
3
                  THE COURT: Mr. Luck, remember that when
   you turn your back, unless you move that microphone, the
4
5
   jury can't hear you.
6
                  MR. LUCK: I'm sorry.
7
             (By Mr. Luck) You -- nevertheless, it's your
        Q.
   opinion that though you're not claiming an established
9
   royalty is created as a result of these prior
10
   agreements, your opinion in this case doesn't deviate a
   great amount from the range of these; is that correct?
11
             I think it depends on what you mean by deviate
12
        Α.
13
   by a great amount. If I believed this was an
   established royalty, I would look at the average, or I'd
14
15
   look at some of the figures, maybe compare Quanta
   Storage compared to companies here, and I would use that
16
   as the value.
17
18
             Five hundred thousand is quite a bit larger
19
   than the amounts we see on this -- this tab.
20
            You said, with respect to Tab 11, that you
21
   analyzed a timeline; isn't that correct?
22
             Isn't Tab 11 supposed to be the timeline at
2.3
           Is that correct?
   issue?
24
        Α.
          Yes. Yes.
25
                  MR. LUCK: If I could have R8, please.
```

(By Mr. Luck) Mr. Reed, isn't this actually 1 Q. 2 the timeline involved here where we have the -- the 3 timing of the LaserDynamics' agreements against the date of the hypothetical negotiation? Isn't this actually a 4 5 true timeline here? Well, this would be a timeline for a broader 6 7 picture of what was going on, but I was focusing on the 8 timeline of those particular agreements. 9 Q. You remember you told me that it was 10 commonplace to observe industry reports on forecasts of projected sales; is that correct? 11 12 I'm not sure I understand the question. 13 sorry. 14 I believe we were discussing how parties would 15 arrive at projected sales, and you said it was commonplace in the industry to look at market forecast; 16 is that right? 17 18 Well, certainly, I think it's common that 19 industry participants will look at third-party forecasts 20 or early forecasts. 21 0. In fact, yourself (sic) relied on a TSR report, is that correct, in this case? 22 2.3 That's -- that's correct. Α. 24 And you believe a report of that nature is 0.

reliable as an indicator of forecast of sales and trends

this case, you made no analysis of these trends, as

A. I'm not sure what you mean by not making any

reflected in the TSR report here?

2.3

24

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59
```

```
though, is over here (indicating), isn't it?
1
2
            Yes, but you should be careful with this chart
3
   because --
                  THE COURT: Well, he just asked you if
4
5
   that's where it was, Mr. Reed.
                  THE WITNESS: All right. Thank you.
6
7
             (By Mr. Luck) So in your report, you didn't
        Q.
   analyze the trends in recordable DVD-W, and how they
9
   were increasing from 1999 through 2006, did you?
10
             I don't know -- yes, I considered this,
   because this is information I'm aware of.
11
12
        Q.
             It's not in your report, though, is it?
13
             No reason for this to be in my report.
        Α.
                  MR. LUCK: If I could ask you to go to
14
15
   Page 9.
16
             (By Mr. Luck) This is another page of the TSR
        Q..
   report on which you relied, and if I could ask you to
17
18
   look on the right-hand side to media market trends.
19
             Do you have that? Is that clear enough --
20
             Yes, it is.
        Α.
21
        0.
             -- on your screen?
22
             Okay. Now, again, on this chart, where are
   the agreements you reviewed under Factor 1?
23
24
             They're over here (indicating), aren't they?
25
             They would be at the beginning of this chart.
```

```
Yes. And where on this chart would be the
1
        Q.
2
   date of the hypothetical negotiation?
3
             Well --
        Α.
             It would be right in here (indicating); is
4
5
   that right?
             According to LaserDynamics, yes.
6
        Α.
7
             What do you mean by that?
        Q.
8
        Α.
             That's --
9
        Q.
             I don't understand your answer.
10
             That's what, in this case, LaserDynamics is
        Α.
   proposing. That's the hypothetical negotiation.
11
             Okay. It's over here (indicating).
12
        Q.
             That would be 2006, correct.
13
        Α.
             And you'll note from this chart referred to in
14
15
   your report that in '06, the trends of DVDs, which you
   understand is -- is covered by the '981 patent, is
16
17
   enhancing; isn't that right?
             It's going up, trending up right there
18
19
   (indicating), right?
20
        Α.
             Well, the question has a premise built into it
21
   that I -- I --
22
        Q.
             I'm sorry?
             Your question has a premise built into it that
2.3
24
   I don't think has been decided by the jury yet.
25
            Well, I just asked you if -- from this chart,
        Q.
```

```
if the DVD trends are trending up?
1
2
             If that's the question, yes. The DVD trend is
   going up. That's absolutely true.
3
             And you also didn't refer to this chart or
4
5
   this analysis in your report, did you?
             No, because this is obvious to the industry.
6
7
                  MR. LUCK: Let me have Factor 23, please.
   23. I can do it on the ELMO.
8
9
        Q. (By Mr. Luck) Let me show you Chart 2.4 from
10
   the TSR report, also -- the TSR survey also in your
11
   report.
12
             Do you have that?
13
             I see that, yes.
        Α.
14
             And you'll notice on this chart, also, the
15
   agreements you reviewed under Factor 1 are back here
16
   (indicating)?
             Absolutely, at the very beginning.
17
        Α.
18
             And the trend in DVD sales is increasing right
        Q.
19
   here (indicating). Here's the date of the negotiation;
   isn't that right?
20
21
        Α.
             Yes.
22
        Q.
            Is that '06?
23
             That's right.
        Α.
24
             You didn't include an analysis of that also in
        Ο.
25
  your report, did you?
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```
I think it's taken into account, but it's an
1
        Α.
2
   obvious trend.
3
        Q. Let me ask you to review this last slide from
4
   this report.
5
             Do you have that?
6
        Α.
             Yes.
7
        Q. On this chart, it's hard to see, but the dates
8
   are up at the top, I believe.
        A. Yes. I believe 2000 corresponds to where we
9
   see the little cloud for PC market. That's
10
   approximately the year 2000.
11
12
        Q. Here (indicating)?
13
                  MR. LUCK: I don't have to do anything
14
   special, do I?
15
            (By Mr. Luck) You'll notice from this chart
16
   that at the time of the agreements you reviewed under
   Factor 1 was in this area here (indicating); is that
17
   correct?
18
19
        Α.
             Yes.
20
            And in this era, CD was the predominant media
21
   type; is that correct?
22
        Α.
            Absolutely.
2.3
            And DVD was just beginning to ramp up; is that
        Q.
   correct?
24
25
        A. Absolutely.
```

- Q. However, if you look at 2006, in this area (indicating), DVD now is the predominant media source on ODDs; is that correct?
- A. By that point, DVD writable, I believe. And the market was already anticipating the next generation and the next generation after that. It's completely expected.
- Q. That's a good point. In fact, even -- even over here, we have now this, and this, I understand, is to be Blu-ray (indicating); is that right?
- 11 A. That's most likely. At that time, it could 12 have also been HD.
- Q. You also -- you also don't refer to that chart in your report; is that correct?
- 15 A. Not specifically to that chart, no.
- Q. Now, in the slides you presented here for the jury, on one of your slides, I believe, you created for us -- remember this one?
- 19 A. Yes.

2

- Q. How did you select, to go on this slide, the particular agreements that you have up here?
- A. Well, generally, all this information came
 from my expert report. In the case of that particular
 area you're asking about, Mr. Luck, basically, I was
 picking up a sampling of the -- of the particular

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entries. For example, I didn't put in Pioneer, in part because Pioneer is covered by the 3C as well. But I wanted to represent a range of the different portfolios that were licensed at a percentage royalty rate. Is your answer the same for these over here (indicating), again, out of your report? It's out of my report, and again, I'm aware Α. there are others, like Yamaha, which has a rate that goes from a dollar down to 12 cents, but -- but this is what I highlighted in my report because of the 25-cent additional charge for the layer technology. MR. LUCK: If I could have R10, please. I'm sorry. The -- is this R10? Yes. (By Mr. Luck) Okay. Help us understand the difference between your slide and these agreements from -- produced by your client in this case, in fact, executed by your client. Aren't these the type of agreements that should be considered under Factor 2, agreements entered into by the licensee? Α. These are agreements that are entered into by REDACTED BY ORDER OF THE COURT

REDACTED BY ORDER OF THE COURT

2 misleading.

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- Q. In fact, not even this chart includes any agreements executed by QCI; is that correct?
- A. This chart does not appear to include any agreements executed by QCI, that's right.
 - Q. Nor does your chart here; is that correct?
 - A. Correct. This is -- this is focused on QSI.
- 9 I did consider, though, the QCI agreements as well.
- 10 Q. Okay. I was just asking you what is on your 11 chart here.
- And so we don't have any agreements entered into by QCI in this case in Factor 2; is that correct?
- A. Well, there is in my expert report. It is something I considered.
- Q. Okay. I understand that. I'm referring now specifically to your slide.
- 18 A. This chart.
- 19 O. Yes.
- A. That's correct. This chart is focused on public information and QSI's agreements that relate to ODD.
- 23 Q. Did you make an analysis under Factor 6?
- 24 A. Yes, I did.
- Q. What is the focus of Factor 6?

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- Well, Factor 6 relates to convoyed sales. Α. what that means is, if by use of a patented technology in a particular product, does it help companies sell another product.
- 5 And you contend, I presume, that -- that the ODDs in this case do not promote the sale of computers; is that correct?
 - A. Well, that's a different point. I think ODDs do help sell computers. The question is whether the patented technology at issue in the hypothetical license is required to -- to sell the computers.
- Q. Are you aware of any ODDs sold anywhere in the 12 13 world that do not -- that do not include disk discrimination technology? 14
- 15 Well, first of all, that's a technical issue. 16 I would direct you to technical experts. But I'm not aware of a -- representations that the patented 17 technology is included in every single product. 18
- I just asked you, do you know of any optical 20 disk drives sold anywhere in the world that do not 21 include disk discrimination technology?
- 22 My understanding is that it does. They do Α. discriminate upon DVD and CD. 23
- 24 And you've not analyzed anywhere in your Ο. 25 expert report any computers sold that do not include

pull up a Georgia-Pacific listing.

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Sure. Okay. Let me pull that up.

I believe you're correct when you spoke earlier that the profits saw by QCI were -- I believe

REDACTED BY ORDER OF THE COURT

- 9 I understand you're an economist, but, of 10 course, any kind of rate paid on computers would not be applied against the bottom line for QCI, would it? 11
- 12 Well, ultimately, it has to be paid somewhere, Α. 13 but if what you're asking is, where do the costs of a royalty get recorded, it would be reflected before you 14
- But that's not addressing the question at hand here, what would happen if you have an additional 17 18 2 percent royalty.
 - What -- what is the profit realized by QCI on computers?
- 21 Α. Well, we had testimony yesterday from Quanta 22 Computer on that -- excuse me -- on this issue, and the
- 23 24
- 25 So it would be -- the logic that would follow

would be that the profit on the computers would be less

REDACTED BY ORDER OF THE COURT

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- Q. Did you also hear Mr. Sankey ask the question, are there any documents to support that contention, and the answer was no?
- A. I heard the -- initially, the answer was, our annual report would provide that information, but then, ultimately, yes, he didn't have any documents with him.
- Q. Did you review any of the documents that showed the profits made by QCI for computers?
 - A. No, only as reflected in the annual report.
- Q. So if Mr. Parker was to say in his opening
 here that the -- the profits QCI sees for computers are
 razor thin, you don't have any evidence to support that,
 do you?
- A. No. I do have evidence. I have the annual report that shows a 2-percent profit, and I have the --
- 18 Q. For the company?
- A. For the company. And the knowledge that most of Quanta Computer -- Quanta Computer, historically, was a company making notebook computers for Dell and others.
- 22 It's a large part of their business.
- So it's -- it doesn't make sense that there

 could be a large profit on computers and over -- and an

 overall profit rate of 2 percent.

disagree with Mr. Davis on the indirect -- his

calculation of the indirect units that he added to

24

that if QCI were to sell a computer, we would just pull

22 I think at that time, I can't -- I'm not sure Α. it's exactly Onkyo. I think one of the parties, and it 2.3 24 might have been Onkyo, wasn't manufacturing it, and some 25 of these companies never did manufacture ODD drives.

```
So -- so it really varies by companies.
1
2
   of these companies became quite large manufacturers;
3
   others didn't manufacture at all; some manufactured a
   smaller amount.
4
5
             Okay. I was just asking you --
        Q.
             I'm not sure about Onkyo.
6
        Α.
7
             Okay. I was just asking you how many they
        Q.
8
   made.
9
        Α.
             I don't know.
10
             Okay. Let's talk about your confirmatory
11
   numbers here.
12
        Α.
             I'm sorry. My what number?
13
             Confirmatory numbers. I believe --
        0.
14
        Α.
             Yes, sir.
15
             -- you had a schedule on that?
        Q.
16
        Α.
             Yes, sir.
             You rely upon the Sony/Asus agreement; is that
17
        Q.
18
   correct?
19
        Α.
             It was a term sheet, not an agreement.
20
             Do you know if the term sheet matured into a
        Q.
   license?
21
             It did.
22
        Α.
2.3
             Are you relying upon both the term sheet and
   the license?
24
25
            Well, I considered both, but it was the term
        Α.
```

```
sheet that had the specific information about the
1
2
   additional rate for the useful patents.
3
             So for that particular piece of analysis, I
   need the term sheet.
4
5
        Q.
             Okay.
                  MR. LUCK: Ms. Dupree, I'm not getting
6
7
   mу
8
                  MS. DUPREE: You need the document cam?
9
                  MR. LUCK: Yes. Yes.
10
                  MS. DUPREE: Sorry. There you go.
11
                  MR. LUCK: Thank you.
12
             (By Mr. Luck) Here is the term sheet; is that
        Q.
13
             Is this the one that you're relying upon?
   correct?
14
             I believe so.
        Α.
15
             Okay. Well, I had the note out here.
   are the patents implicated under this agreement?
16
             I believe it's the way I addressed it, that
17
        Α.
   the 2-percent rate, it would be the essential patents of
18
19
   Sony, and then for the additional .1 percent, it would
20
   be what was called useful patents.
21
        0.
             What are essential patents?
22
             Well, the essential patents would be patents
   viewed as necessary to manufacture the products, the DVD
23
24
  products, ODD products, under the standards that have
25
  been specified for DVD and ODD.
```

```
And which patents in this agreement were
     Q.
deemed to be essential? Did you analyze those?
```

2

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23

Yes. We saw earlier -- I didn't analyze the specific patents. I looked at the list of patents from the Sony website, and I had showed a slide earlier that had the list.

Sony had -- it was about 50 U.S. patents and I believe it was 300 U.S. patents that were part of its licensing program of essential patents that were also licensed through Philips in the 3C.

- Was the Sony/Asus agreement entered into under any kind of presumption of validity or infringement?
- 13 Α. Not in the sense that we're asking to assume here, but when you have that many patents, the reality 14 15 is you are going to believe that --

THE COURT: Mr. Reed, please listen to the question and answer the question he asks you. Don't start -- we're going to get a little -- have more involvement by me, which that's not good for any of us.

THE WITNESS: Yes, sir.

THE COURT: Just answer the question asked. We're trying to get through with this. 22

THE WITNESS: Okay.

24 (By Mr. Luck) Did you not also tell me that an 0. 25 essential patent is one that is difficult to design

```
around or is presumed it cannot be designed around?
1
2
   that correct?
3
        A. I believe in some cases, that's -- that's
   true, yes.
4
5
             Do you believe the patents in the Sony/Asus
        Q .
   agreement are essential?
6
7
            I would have to point you to a technical
        Α.
8
   expert. I believe that Sony believes that.
9
        Q.
             In your opinion, did you assume they were?
10
        Α.
             No. My opinion focused on the additional
11
   useful patents.
12
            Well, if you don't know what is the goose and
        Q.
   the gander, how do you know? In order to determine
13
   the -- the patents under Option B, you have to know
14
   those under Option A, don't you?
15
16
        Α.
             I don't believe so.
             Did you analyze the other patents under Option
17
18
   B, the useful patents? Did you look at their scope?
19
        Α.
             I'm sorry. You said Asus patents --
20
        Q.
             The --
21
             -- or useful?
        Α.
22
             The useful patents, yes --
        Q.
             I'm sorry.
23
        Α.
24
             -- under Option B.
        Ο.
25
             No. I don't know particularly what the useful
        Α.
```

8 0 1 agreements? 2 I have followed the Nissim program for quite a 3 while and frequently refer to it. And I wouldn't say I focused on Nissim. It was one of the pieces I 4 5 considered. Have you analyzed the patent, subject of that 6 7 program? 8 Not from a technical standpoint, but I am 9 aware of the patents and the number of patents. 10 Are you aware of -- in your report, is there any kind of analysis of those players in the industry 11 12 that have executed any patents in this program? 13 A. I believe so, yes. I mentioned them in my 14 report. 15 Have you analyzed in your report whether any of these patents cover products manufactured by QCI? 16 17 You haven't, have you? 18 I don't believe I have, no. Α. 19 In your report, have you made any kind of analysis whether QCI requires the technology in this 20 21 program? 22 Α. I don't know.

And so you haven't made any analysis of

whether the accused computers or the drives in those

computers fall within the scope of this program, have

2.3

24

programs that don't seem to fit where we are today.

```
take issue with that, obviously.
```

- A. I do take issue with how you just
- 3 characterized that.
- Q. Now, in your -- I believe you earlier said that your clients always had the option to buy drives from the licensees; is that right?
- 7 A. They would have -- have in this hypothetical 8 negotiation, yes.
- 9 Q. And that option would have begun when: The 10 date of the negotiation?
- A. In a sense, it would be argued in the negotiation.
- Q. Okay. In the negotiation?
- So their opportunity to take those options to buy drives elsewhere began in the negotiation; is that right?
- A. Because in the hypothetical negotiation, you would have an understanding about what you could do.
- Q. And so -- well, to be clear, their option to purchase from the licensees would have begun in August of '06; is that right?
- 22 A. Yes. In the hypothetical, that's correct.
- Q. But in the time period since this suit was
 filed, your clients have not exercised that option, have
 they?

```
A. Correct, for the reasons previously addressed.
```

- Q. Now, you also have applied -- one of your slides here -- over here (indicating), you're applying rates against a chipset; is that right?
 - A. That's right.
- Q. Why?

2

3

4

5

6

7

- A. Because it's another way to benchmark the potential valuation of patent royalties and patent licenses.
- Q. Is it your understanding that a chipset falls within the scope of the '981 patent claim?
- A. That's my understanding, and that's what
- 13 Professor MacFarlane had told me as well.
- 14 Q. I don't think we heard that today, did we?
- 15 A. I have to say I wasn't here for all of
- 16 Professor MacFarlane's testimony.
- MR. LUCK: Let me have -- let me have
- 18 Exhibit 2, please.
- 19 Q. (By Mr. Luck) Mr. Reed, have you -- have you
- 20 heard in the testimony in this case any allegations that
- 21 a chipset infringes the '981 patent?
- 22 A. Not specifically.
- 23 Q. Well, specifically or generally.
- 24 A. Well, I heard Dr. Howe's testimony relating to
- 25 chipsets and source code.

27055 84 1 Q. Okay. 2 MR. LUCK: If I could ask you to thumb 3 through to the claims, please. Okay. There we go. the bottom here, Claim 3. 4 5 (By Mr. Luck) I understand you're an economist, but even going from the language here, is it 6 your understanding that a chipset falls within the scope of this claim and thus is a good surrogate for your 9 damage evaluation in this case? I can't address the technical issues. 10 So, now, we have this slide here, but you know 11 12 if it fits that; is that right? I've been told that it fits. 13 Α. 14 By Professor MacFarlane? 0. 15 Α. Yes. 16 Okay. Finally, I think you said that QCI Q. cannot afford to pay the rates requested by Plaintiff in 17 18 this case, because they couldn't afford to raise their 19 The market's very competitive. 20 Do you remember that? 21 I think I probably said they couldn't raise Α. 22 their prices.

- 2.3 Could not. Q.
- 24 Not for this royalty, that's correct. Α.
- 25 Okay. And you presume from that answer that Q.

MR. LUCK: Thank you, sir.

MR. GARNETT: No, Your Honor. No further

THE COURT: Redirect?

2.3

24

```
1
   questions.
2
                  THE COURT: Okay. You may step down.
3
                  THE WITNESS: Okay.
                  THE COURT: Who will be your next
4
5
  witness?
6
                  MR. PARKER: Your Honor, at this time,
7
   the Defendants would rest their case-in-chief.
8
                  THE COURT: All right. Counsel approach.
9
                  (Bench conference.)
10
                  THE COURT: How much rebuttal are you
11
   going to have?
                  MR. SANKEY: If we could have our break
12
13
   and figure it out. If we have anyone, it will be one
14
  witness and very short.
                  THE COURT: Well, I tell you what, we'll
15
   go ahead and break until 3:30, but we'll also take up
16
   everybody's motions right now. And yours will be deemed
17
18
  made as at the close of the time they rested. You might
19
   as well go ahead and make whatever motions you want, and
20
   then we'll break till 3:30.
21
                  Okay. Thank you step back.
22
                  (Bench conference concluded.)
2.3
                  THE COURT: Ladies and Gentlemen, we
24
  have some legal issues that come up at this point. I'm
25
  going to say that we're -- I hate to say this, because
```

```
1
   every time I make predictions, I'm wrong, but I might as
2
   well be consistently wrong, I guess.
3
                  I still believe we'll get out of here not
   later than 4:00 o'clock today. But I'm going to take a
4
5
   little extra long, and I'm going to release you until
          Be back ready to come back in the courtroom at
6
   3:30.
   3:30. See you back in here at 3:30. Don't discuss the
8
   case.
9
                  (Jury out.)
10
                  THE COURT: Please be seated.
11
                  All right, Mr. Parker.
12
                  MR. PARKER: Yes, sir.
13
                  Your Honor, the Defendants move for
   judgment as a matter of law. And as I understand it,
14
15
   based on the instructions that have been given by the
   Court, this motion is considered to have been made at
16
   the end of the Plaintiff's case and is now being renewed
17
18
   at the end of the case-in-chief of both parties.
19
   And --
20
                  THE COURT: That's correct.
21
                  That's Plaintiff's counsel understanding,
   also, right?
22
2.3
                  MR. LUCK: It is, Your Honor.
24
                  THE COURT: Okay.
25
                  MR. PARKER: Sir, we believe that we are
```

2

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entitled to judgment as a matter of law because the
Plaintiffs have clearly not carried their burden on the
issue of proving infringement even by a preponderance of
the evidence.
               And the reason we say that, Your Honor,
is -- and I cite specifically to this Court's rules and
the orders of this Court amending its rules or
supplementing its rules, and specifically, to local
patent rule 3-1, paren H, close paren, which states, if
a party claiming patent infringement asserts that a
claim element is a software limitation, the party need
not comply with patent rule 3-1 for those claim elements
until 30 days after the source code for each accused
instrumentality is produced by the opposing party.
               Thereafter, the party claiming patent
infringement shall identify -- and this is, to me, the
crucial language -- on an element-by-element basis for
each asserted claim what source code of each accused
instrumentality allegedly satisfies the software
limitations of the asserted claim elements.
               Their only evidence to support
infringement is the testimony of their expert, Mr. Howe,
who admitted, with respect to each one of the 20 accused
drives, that he had not done a line-by-line,
element-by-element analysis of the source code.
```

16

25

jury, but go ahead for the record.

```
1
  He tries to accomplish it through a leap of faith from
  his line-by-line, element-by-element analysis of the
2
  source code associated to two Asus drives, and
3
   similarly, his prior line-by-line, element-by-element
4
5
   analysis of the source code related to a BenQ drive.
                  That does not meet -- in my judgment and
7
   I submit, it should not meet and should not be held to
8
  meet the standard established by this Court or
9
   established by the whole line of legal precedent when
10
   somebody is accusing someone of infringement of a method
   patent and it depends on the analysis of source code,
11
   which must be done for each accused instrumentality on
12
13
   an element-by-element basis. It simply has not happened
14
  here.
15
                  THE COURT:
                              Okay. Motion denied.
                  Anything from the Plaintiff?
                  MR. SANKEY: Your Honor, with respect to
17
18
   the defenses raised by the Defendants -- one second,
19
   please -- I believe that there are a number of defenses
20
   that have been voluntarily dropped because we heard no
21
   testimony on them whatsoever.
22
                  THE COURT: Well, let me tell you, this
   Court's practice will not be to grant a JMOL; this
2.3
24
   Court's practice will be reflected in its charge to the
```

```
MR. SANKEY: With the ones that I've
1
   looked at with the charge, with respect to obviousness,
2
3
  no testimony on that.
4
                  With respect to anticipation, no
5
  testimony on that.
                  With respect to prior art and invalidity,
6
7
   I think the only thing that the witness said was that
  he -- he cited the two patents. He did not do any kind
9
   of claim-by-claim analysis of it.
10
                  THE COURT: All that will be reflected --
11
   the Court prepared you a draft of the charge, based on
12
   what had been pled, not what I know the evidence was
   going to be.
13
14
                  So I'm not granting a JMOL, but it will
15
   be reflected in the Court's charge.
16
                  MR. SANKEY: Thank you, Your Honor.
                  That's all I have.
17
18
                  THE COURT: Well, that didn't take long.
19
                  We are going to take out the charge, I
20
   will tell you, those -- I'm going to put back
21
   enablement. Was that pled?
22
                  MR. PARKER: Yes, sir.
2.3
                  THE COURT: There wasn't any objection to
24
   the testimony, so enablement will be in.
25
                  And the others that there were no
```

```
testimony will not -- they will not be in the Court's
1
2
   charge. The legal effect of that, I think, is clear.
  But what I was going to discuss with you, since we had a
3
  few extra minutes, was, when we come back in at 3:30,
4
5
  and let's assume that we do get this jury out of here by
   4:00 o'clock, based on representations, then I would
6
  propose that we'll have a charge conference on the
   Court's charge immediately, as soon as we dismiss the
8
9
   jury.
10
                  And we'll have an informal charge right
   thereafter and then probably, before 5:00 o'clock, we'll
11
12
   finalize the -- well, let me say this: An informal
13
   charge, we'll do that in chambers. And what I really
   want you to do is get specific as to what it is that
14
15
   gives you the worst case of heartburn, you know what you
16
   really want to object to.
17
                  I'm not talking about objections that
18
   you're going to need to make for the record on the
19
   sufficiency of the evidence; I'm talking about the
20
   charge itself.
21
                  Then the Court would propose to give you
   a final draft. We would come back out before we leave
22
  here today and take on the record final objections,
23
24
   formal objections, to the Court's charge and verdict
25
   form so that we come back on Monday morning, and we'll
```

```
92
```

```
roll out of here with arguments at 8:30, 30 minutes a
1
2
   side, followed by the Court's charge.
3
                  I do not give them a copy of the charge
  to take back in the jury room. You're free to tell them
4
5
   in your argument -- and I say this now just so I don't
   forget later in the afternoon -- you're free to argue to
6
   the jury that this is what the Court will be charging
8
   you, you know, about the law.
9
                  But they don't -- I just want you to know
10
   that it will not be sent back with them. It will just
11
   be the questions.
12
                  With that, I'll see you back in here at
   3:30.
13
14
                  COURT SECURITY OFFICER: All rise.
15
                  (Recess.)
16
                  COURT SECURITY OFFICER: All rise.
17
                  (Jury in.)
                  THE COURT: Please be seated.
18
19
                  All right, Mr. Sankey.
20
                  MR. SANKEY: Your Honor, Plaintiff
21
   LaserDynamics, in its rebuttal case, will briefly call
   Dr. Howe back to the stand.
22
2.3
                  THE COURT: All right. Dr. Howe, come
   around.
24
25
                  Dr. Howe, do you understand you're still
```

```
27064
                                                            93
   under oath?
1
2
                  THE WITNESS: I do. Thank you.
3
                  THE COURT: All right. Thank you.
                  Let's proceed.
 4
5
      DENNIS HOWE, PLAINTIFF'S WITNESS, PREVIOUSLY SWORN
6
                      DIRECT EXAMINATION
7
   BY MR. TROP:
8
             Dr. Howe, were you present during the
9
   testimony of Dr. MacFarlane?
10
             Yes, I was.
        Α.
             Did you hear anything from Dr. MacFarlane
11
   about the SBAD signals that you relied on in connection
12
13
   with the processing step of Claim 3?
14
             I did not.
        Α.
15
                  MR. PARKER: Your Honor, may we approach?
16
                  THE COURT: Yes.
17
                  (Bench conference.)
18
                  MR. PARKER: Your Honor, this is the same
19
   kind of situation I got --
20
                  THE COURT: I know what it is.
21
                  MR. PARKER: Yes, sir.
22
                  THE COURT: Get off of that, Mr. --
2.3
                  MR. TROP: Pardon?
```

THE COURT: You're trying to do exactly

what they tried to pull that got me so upset. Now, I

24

```
1
   don't want to get upset --
                  MR. TROP: We're not going to put any
2
3
   more --
                  THE COURT: Well, I know you're not.
4
5
                  Now, get back there and stay with
   what's -- you know, don't get me involved this late in
6
   the day. You don't want it to happen.
8
                  MR. TROP: I understand, Your Honor.
9
                  THE COURT: Let's qo.
10
                  (Bench conference concluded.)
             (By Mr. Trop) Dr. Howe, what is your opinion
11
   about whether one skilled in the art would be able to
12
   make and use the invention set forth in Claim 3?
13
14
             I think it's -- it's enabled completely.
15
             And -- and what is the level of skill of one
16
   in this art in 1995?
17
             In my opinion, he would have a bachelor's
        Α.
18
   degree in electrical engineering, coupled with at least
19
   four years' experience in the area of optical disk
20
   drives systems technology or an advanced degree and two
21
   years of experience.
22
             Now, do you recall Dr. MacFarlane's testimony
2.3
   about what he described as an infinite loop in one of
24
   the figures in the '981 patent?
25
        Α.
             Yes.
```

Α.

No, it's not.

- A. If the disk has not been identified, according to that schematic, it would, yes.
 - Q. Okay. And there is no counting parameter, for instance, taught in the '981 patent.
 - A. A counting parameter is not mentioned.
- Q. And a counting parameter would be stopping it at a certain number of loops, correct?
 - A. Correct.

4

5

8

19

20

21

22

- 9 Q. Okay. And the '981 patent does not describe
 10 how the second loop or any additional loop -- loops
 11 differ from the first loop.
- A. Well, it goes around a loop in the instance in which a disk has not been identified.
- So, presumably, if the disk is identified in the first loop, it does not take the note path on the left and go around the loop again.
- Q. In your expert report, you do not discuss a third loop or a fourth loop or a counting parameter.
 - A. I believe I may have mentioned one type of identified disk as being a no disk, and that's what you would do when you time out in your loop. You would report back with no disk.
- Q. But that's not described in the '981 patent.
 - A. That's not described in the '981 patent.
- MR. PARKER: Thank you.

```
THE COURT: Anything further?
 1
 2
                  MR. TROP: Nothing further, Your Honor.
 3
                  THE COURT: All right. You may step
 4
   down.
 5
                  MR. SANKEY: Your Honor, at this time,
 6
   Plaintiff LaserDynamics rests its rebuttal case.
 7
                  THE COURT: Close then?
 8
                  MR. SANKEY: Close.
 9
                  THE COURT: Close?
10
                  MR. PARKER: Close.
11
                  THE COURT: Why don't you stay there for
   a minute.
12
13
                  All right. Go ahead, Dr. Howe, and step
14
   down.
15
                  THE WITNESS:
                                Sorry.
16
                  THE COURT: No. That's fine. That's all
   right.
17
18
                  THE WITNESS: Sorry.
19
                  THE COURT: I've got this train on track.
20
                  That's all right. I'll pull my foot off
21
   the accelerator.
22
                  All right, Ladies and Gentlemen. You've
2.3
   heard all of the evidence in this case, and I'm going to
24
   dismiss you until Monday morning at 8:30.
25
                  Now, this is a critical part of the case.
```

```
You have heard all the evidence. You have not yet heard
1
   the argument of counsel and nor have you heard the
2
  Court's instructions as to the law and explaining to you
3
   the different burdens of proof and how they apply and
4
5
  the questions that you're going to be asked.
                  So it's real critical that you not make
6
7
   up your mind in this case or start making up your mind
  until you've got all of that information before you,
9
   which you will have before noon on Monday morning. My
10
  best prediction is somewhere between 10:00 and 10:15,
   you'll probably have the case in your hands in
11
  deliberations.
12
13
                  And so do not, at this point -- I just
  reemphasize my instructions about not doing any research
14
15
   on the internet or allowing anyone to discuss it with
   you. I'm talking about your family or your friends or
16
17
   anybody, and just avoid those discussions.
18
                  And travel safely over the weekend, and
19
  have a happy Fourth of July, and I'll see you back here
20
  Monday morning, okay?
21
                  Y'all are excused.
22
                  (Jury out.)
2.3
                  THE COURT: All right. Please be seated.
24
                  Do you think the Plaintiff can be ready
25
   if we come in at 10 until 4:00? Does that give you
```

```
sufficient time to look at the charge or not?
1
2
                  MR. SANKEY: It will, yes, Your Honor.
3
                  MR. PARKER: Yes, sir.
                  THE COURT: Okay. Why don't we get back
4
5
   in the chambers at 10 till 4:00.
                  The only other thing I want to write down
6
   this afternoon before I forget is, when I meet with you
   in there, I told you I want to give you 30 minutes a
9
   side. The Plaintiff has to use at least half their time
10
   in opening or they will not have an equal amount of time
11
   in closing.
12
                  One of the things I'll be asking you, and
   you might want to think about is, what kind of warnings
13
14
   you want? I don't have a set pattern. I'll give you
15
   any kind of warning you want just about.
16
                  So if you have a preference, I'll take
17
   that up with you, and I'll see you in there in just a
18
   few minutes, 10 till.
19
                  COURT SECURITY OFFICER: All rise.
20
                  (Recess.)
21
                  COURT SECURITY OFFICER: All rise.
22
                  (Jury out.)
2.3
                  THE COURT: Please be seated.
24
                  In making your final objections, on
25
   Question No. 1, it will end with a question mark after
```

```
the word patent for making an objection. That last
1
  phrase is off there, but the projects will be
2
3
  individually listed as the Defendant requested.
                  All right. I'll take objections at this
 4
5
  time from the Plaintiff.
                  MR. SANKEY: Your Honor, on behalf of the
6
  Plaintiff, LaserDynamics, we would object to the
   inclusion of the instruction of validity, the
9
   instruction of enablement, and Question No. 2, based on
10
   the lack of evidence of the level of skill in the art,
   and specifically undue experimentation, which we believe
11
12
   leads to non-enablement not being able to be established
   as a matter of law.
13
14
                  And our second objection would be to
15
   Question No. 1. In breaking it down into the 20
16
   individual drives, we would specifically request that
   we -- that the question read: Do you find from a
17
   preponderance of the evidence that Quanta Computer,
18
19
   Inc., contributed to or induced infringement of the
   Claim 3 of the '981 patent? Answer yes or no.
20
21
                  That concludes our formal objections.
22
                  THE COURT: Those are overruled.
2.3
                  Let me hear from the Defendant.
24
                  MR. PLATT: On behalf of the Quanta
25
  Defendants, we would object to the current wording of
```

```
the enablement instruction in light of the fact that
1
2
   there's no disclosure under which one of the processes
   in the claim can be carried out, as admitted by their
3
   expert.
4
5
                  We believe that the instruction should be
   in accordance with Genentech versus Novo Nordisk case,
6
   108 F 3d 1361 at 1366 Fed Cir 1997.
8
                  And we also object to the inclusion of
9
   August 31st as the date of the hypothetical negotiation.
10
   We think the charge should read that it's the date of
   the first infringement.
11
12
                  That's our only objections.
13
                  THE COURT: Okay. Those are overruled.
                  The Court reviewed, just for the record,
14
15
   the case that you cited. I believe that's a chemical
   compound case?
16
17
                  MR. PLATT: Yes, sir.
18
                  THE COURT: Earlier this week, we tried a
19
   somewhat -- we included some additional instructions on
20
   enablement, but I don't think that's what applies to
21
   this case.
22
                  All right. How much time -- any requests
   from the Plaintiff -- well, what are your requests for
2.3
24
   how you want to divide your time?
25
                  MR. SANKEY: Your Honor, I'll divide my
```

```
time 23 minutes for my opening and 7 for the --
1
2
                  THE COURT: All right. When do you want
3
  me to tell you: That you've used 23 or that you've used
   22 or --
4
5
                  MR. SANKEY: Actually, if you can tell me
  when I -- when I have five minutes left on the 23.
6
7
                  THE COURT: All right. I'm going to
8
  tell -- what I'm going to tell you is, you've used 18.
9
   I'm going to rely on your math.
10
                  MR. SANKEY: Yes, sir.
                  THE COURT: And then I always, whether
11
12
   you want it or not, give a one-minute warning, because I
13
   don't ever like to -- one minute left in your rebuttal,
14
   okay?
15
                  MR. SANKEY: That's perfect.
16
                  THE COURT: Because I don't ever like to
17
   interrupt anybody, if I can possibly help it.
18
                  MR. SANKEY: That's great. Thank you.
19
                  THE COURT: Mr. Parker?
20
                  MR. PARKER: I would like just a
21
   five-minute warning, Your Honor.
22
                  THE COURT: Five minutes?
2.3
                  MR. PARKER: Yes, sir.
24
                  THE COURT: I'm going to tell you the
25
   same thing. If you're in that last minute, I'm going to
```

```
1
   say one minute, okay?
                  MR. PARKER: Yes, sir. I appreciate it.
2
3
                  THE COURT: All right. Now then,
   somebody asked the clerk -- I quess somebody from the
4
5
   Defendants said something to Mr. Ahmed about inequitable
   conduct.
6
7
                  What I'd like for you to do is bring your
8
   calendars on Monday, and while the jury is out
9
   deliberating, we'll be assuming that we're going to need
10
   that, and we can go ahead and get a hearing date and --
   within the Court's schedule.
11
12
                  How much time do you think you'll need?
   Do you have any idea?
13
14
                  MR. PARKER: Half a day -- Christian,
15
   half a day?
16
                  MR. PLATT: Yes.
17
                  MR. PARKER: Half a day.
18
                  THE COURT: Okay. Well, we'll talk about
19
   that then, and I assume we'll have plenty of time while
20
   the jury is deliberating on Monday.
21
                  Anything else?
22
                  MR. SANKEY: Nothing further from the
23
   Plaintiff.
24
                  MR. PARKER: Nothing from the Defendants,
25
   Your Honor.
```

```
THE COURT: All right. Now then, the
 1
 2
   other thing is, if you're going to use demonstratives
 3
   that have not previously been used, I want you to
   exchange them by 5:00 o'clock on Sunday.
 4
 5
                  MR. PARKER: Yes, sir.
 6
                  THE COURT: And then as will be my usual
   practice, I'll be in here around 8:00 o'clock Monday
   morning should we need to take something up.
9
                  MR. PARKER: Yes, sir.
10
                  MR. SANKEY: Yes, sir.
11
                  THE COURT: All right. Fine.
12
                  Y'all have a nice week. Happy Fourth to
13
   you.
14
                  MR. PARKER: You, too, Your Honor.
15
                  COURT SECURITY OFFICER: All rise.
16
                  (Court adjourned.)
17
18
19
20
21
22
2.3
24
25
```